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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,376

04/29/2005

Leung Choi Chow

2733.30US01

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04/01/2008

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EXAMINER

COLLINS, TIMOTHY D

ART UNIT

PAPER NUMBER

3643

MAIL DATE

DELIVERY MODE

04/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/533,376

Applicant(s)

CHOW ET AL.

Examiner

Timothy D. Collins

Art Unit

3643

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-4 and 7-20 is/are rejected.
7) ☒ Claim(s) 5 and 6 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 29 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date 2/22/07 4/29/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 12,13,15,16,18, and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by EP 1067045 A1 as cited by the applicant, hereinafter called 045.

a. Re claims 12,13,15,16,18 and 20, 045 discloses landing gear in figure 1, and a fairing 17 with region through which air may pass (the 2 holes in the fairing). In use, some air is deflected away from a noise-generating region of the landing gear and some air passes through the holes in the fairing. There is a multiplicity of holes because there are 2. It is also noted that the fairing is convex. As seen in column 7 at paragraph 0042 the fairing reduces noise.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-4,7-11,14,17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1067045 A1, as applied to claims 12,13,15,16,18, and 20 above.

b. Re claims 1,2,14,17 and 19, 045 discloses landing gear in figure 1, and a fairing 17 with region through which air may pass (the holes in the fairing). In use, some air is deflected away from a noise-generating region of the landing gear and some air passes through the holes in the fairing. However 045 does not disclose 10 apertures or 50 apertures, but since it does teach of multiple holes, through routine testing and experimentation it would have been obvious to one of ordinary skill in the art that the size and quantity of the holes may be changed to allow for a more efficient flow of air through the fairing. This would be done for the predictable result of changing the flow to change sound level and drag over the landing gear. As seen in column 7 at paragraph 0042 the fairing reduces noise.

c. Re claim 3, 045 discloses that the holes are perforations because holes are perforations that go through solid materials.

d. Re claim 4, 045 discloses that the arrangement of the apertures is non-uniform because as seen in the figure the holes are toward the edges of the fairing. Therefore it would have been obvious to one of ordinary skill in the art to place the holes in a non-uniform way so as to direct air around parts of the gear that will cause increased drag and noise.

e. Re claim 7, 045 discloses that the airflow reducing region is between two regions of the air-deflecting surface.

- f. Re claim 8, 045 discloses that the airflow reducing region is in front of stagnation points because the holes are seen to be in front of large portions of the landing gear which cause stagnation points.
- g. Re claims 9 and 10, 045 discloses that the noise reducing means shields a portion of the landing gear and is in the form of a fairing.
- h. Re claim 11, 045 discloses that the landing gear is movable because of at least the figures showing a retractable landing gear and also in the abstract it can be seen that the gear is retractable.

Allowable Subject Matter

- 5. Claims 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy D. Collins whose telephone number is 571-272-6886. The examiner can normally be reached on M-F, 7:00-3:00, with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy D. Collins/

Primary Examiner, Art Unit 3643